

CLAIMS

What is claimed is:

1. A system for use with network address translation (NAT) systems, comprising:
a processor; and
a storage device in communication with said processor; and
computer instructions stored on said storage device and configured for execution by said processor, wherein said computer instructions perform H.323 synchronization between a first H.323 compliant system located anywhere on an internal private network and a second H.323 compliant system located anywhere on an external public network or on a second private network, wherein said internal private network or said second private network are separated from said external public network by a NAT system.
2. The system of claim 1, wherein said first H.323 compliant system shares the same IP address and/or ports with said second H.323 compliant system.
3. The system of claim 1, further comprising an H.323 compliant gatekeeper.
4. The system of claim 1, further comprising an H.323 compliant gateway.
5. The system of claim 1, further comprising an H.323-to-H.323 gateway.
6. The system of claim 1, further comprising an H.323 endpoint proxy.

7. A method for placing a video conference call using an Internet Locator Service (ILS) from a first H.323 compliant node on a public network to a second H.323 compliant node on a private network, said public network separated from said private network by a Network Address Translation (NAT) device, said method comprising:
providing a system for H.323 synchronization located on said private network and in communication with said NAT device and said second H.323 compliant node;
querying an ILS for an IP address corresponding to said NAT and email address of said second H.323 compliant system;
initiating said video teleconference call through said NAT at said IP address;
synchronizing said video teleconference call through said system for H.323 synchronization to said second H.323 compliant node at said email address; and
performing said video teleconference call as an H.323 gatekeeper routed call.

8. A method for placing a video conference call from an external H.323 endpoint located on a public network to an internal H.323 endpoint on a private network, said public network separated from said private network by a Network Address Translation (NAT) device, said method comprising:
providing a system for H.323 synchronization located on said private network and in communication with said NAT device and said internal H.323 endpoint;
initiating said video conference call to said NAT;
synchronizing said video conference call through said system for H.323 synchronization to said internal H.323 endpoint; and
performing said video teleconference call as an H.323 gatekeeper routed call.

9. A method for placing a video conference call using an Internet Locator Service (ILS) from an internal endpoint on a private network to an external endpoint on a public network, said public network separated from said private network by a Network Address Translation (NAT) device, said method comprising:

providing a system for H.323 synchronization located on said private network and in communication with said NAT device and said internal endpoint;
querying said ILS for contact information about said external endpoint via said NAT device;
asking permission from said system for H.323 synchronization to contact said external endpoint based on said contact information;
initiating said video conference call through said system for H.323 synchronization to said external endpoint upon approval; and
performing said video teleconference call through said system for H.323 synchronization.

10. A method for placing a direct IP video conference call from an internal endpoint on a private network to an external endpoint on a public network, said public network separated from said private network by a Network Address Translation (NAT) device, said method comprising:

providing a system for H.323 synchronization located on said private network and in communication with said NAT device and said internal endpoint;
requesting permission from said system for H.323 synchronization to call said external endpoint directly by IP address;
receiving permission and synchronizing said video teleconference call through said system for H.323 synchronization to said external endpoint; and
performing said video teleconference call as a gatekeeper routed call directly between said internal endpoint and said external endpoint.

11. A method for placing a gateway video conference call from a first internal endpoint to a second internal endpoint, said method comprising:
providing a system for H.323 synchronization in communication with said first internal endpoint and said second internal endpoint;
requesting permission from said system for H.323 synchronization to make a gateway call from said first internal endpoint to said second internal endpoint having an alias and an IP address;
checking to see if said alias and said IP address is a registered match;
if said alias and said IP address are registered, then said gateway video conference call is approved as a direct call between said first internal endpoint and said second internal endpoint;
if said IP address is registered endpoint but said alias is not registered, then said gateway video conference call is rejected; and
if said alias is registered but said IP address is not registered, then said gateway video call is approved as a routed call through said system for H.323 synchronization to said second internal endpoint.

12. A method for placing an Internet Locator Service (ILS) call from a first internal endpoint to a second internal endpoint, said method comprising:
providing a system for H.323 synchronization in communication with said first internal endpoint and said second internal endpoint;
querying said ILS for contact information about said second internal endpoint;
requesting permission from said system for H.323 synchronization to direct call said second internal endpoint;
recognizing and approving said direct call to said second internal endpoint; and
proceeding with said direct call between said first internal endpoint and said second internal endpoint.

13. A method for placing an Internet Locator Service (ILS) call from a first internal EnVision™ node to a second internal EnVision™ node, said method comprising:
providing a system for H.323 synchronization in communication with said first EnVision™ node
and said second EnVision™ node;
querying said ILS for contact information for said second internal EnVision™ node;
requesting permission from said system for H.323 synchronization to make a call to said second
internal EnVision™ node based on said contact information;
recognizing said second internal EnVision™ node is registered and approving said call;
sending said first internal EnVision™ node a private IP address corresponding to said second
internal EnVision™ node;
said first internal EnVision™ node calling said second internal EnVision™ node at said private
IP address;
said second internal EnVision™ node requesting permission from said system for H.323
synchronization to accept said call; and
proceeding with said call between said first internal EnVision™ node and said second internal
EnVision™ node after receiving permission from said system for H.323 synchronization.

14. A method for placing a direct IP address or alias call from a first internal endpoint
to a second internal endpoint, said method comprising:
providing a system for H.323 synchronization in communication with said first internal endpoint
and said second internal endpoint;
said first internal endpoint requesting permission from said system for H.323 synchronization to
place said direct IP address or said alias call from said first internal endpoint to said
second internal endpoint;
approving said request to place said direct IP address or said alias call;
said first internal endpoint calling said second internal endpoint;
said second internal endpoint requesting permission to accept said call; and
proceeding with said direct IP address or alias call between said first internal endpoint and said
second internal endpoint.

15. A method for placing a dual network address translation (NAT) device, endpoint to endpoint, gateway call from a first endpoint located on a first private network to a second endpoint located on a second private network, said first private network being separated from a public network by a first NAT device and said second private network being separated from said public network by a second NAT device, said method comprising:

- providing a first system for H.323 synchronization in communication with said first endpoint and said second endpoint and a second system for H.323 synchronization in communication with said second endpoint;
- said first endpoint gateway calling said second endpoint using an IP address of said second NAT device and an alias of said second endpoint;
- said first endpoint performing an admissions request with said IP address to said first system for H.323 synchronization;
- said first system for H.323 synchronization determining that said IP address is not registered with said first system for H.323 synchronization and approving said admissions request as a gatekeeper routed call;
- said first endpoint placing said call to said second endpoint through said first system for H.323 synchronization, said first NAT device, said second NAT device and said second system for H.323 synchronization in turn;
- said second endpoint performing an admissions request to said second system for H.323 synchronization; and
- performing said call between said first endpoint and said second endpoint after receiving approval from said admissions request.

16. A method for placing a dual network address translation (NAT) device, EnVision™ node to EnVision™ node, Internet Locator Service (ILS) assisted call, said method comprising:

providing a first system for H.323 synchronization in communication with said first endpoint and said second endpoint and a second system for H.323 synchronization in communication with said second endpoint;

said first endpoint querying said ILS for contact information including an IP address for said second NAT device and alias for said second endpoint;

said first endpoint gateway calling said second endpoint using said IP address for said second NAT device and said alias of said second endpoint;

said first endpoint performing an admissions request with said IP address to said first system for H.323 synchronization;

said first system for H.323 synchronization determining that said IP address is not registered with said first system for H.323 synchronization and approving said admissions request as a gatekeeper routed call;

said first endpoint placing said call to said second endpoint through said first system for H.323 synchronization, said first NAT device, said second NAT device and said second system for H.323 synchronization in turn;

said second endpoint performing an admissions request to said second system for H.323 synchronization; and

performing said call between said first endpoint and said second endpoint after receiving approval from said admissions request.